

REMARKS

Claims 1-4 and 6-11 are pending herein.

I. The objections to the drawings.

Applicants respectfully note that present Figure 14 has been amended as shown in the attached Replacement Sheet to include the label "Prior Art." No new matter is introduced by these amendments.

II. The obviousness rejection of claim 5 based on Moore et al. (US 5,683,518) and Ushikoshi (US 5,683,606).

The USPTO respectfully rejects claims 1-4 and 6-7 under 35 U.S.C. § 102(b) as being anticipated by Moore et al. Claim 1 is an independent claim. Applicants respectfully note that independent claim 1 has been amended to incorporate the limitations of claim 5. Thus, the USPTO's obviousness rejection of claim 5 based on the combination of Moore and Ushikoshi (US 5,683,606) will also be addressed herein.

A. There is no motivation to combine the Moore reference and the Ushikoshi reference because the primary reference Moore "teaches away" from using a heater formed on a substrate holding surface of the substrate holding unit, as claimed in claim 1.

Claim 1 claims in relevant part:

"wherein the first heating unit is a heater **formed on a substrate holding surface of the substrate holding unit.**" (emphasis added)

No new matter is introduced by these amendments because the amendment incorporates the limitations of claim 5 into independent claim 1. Regarding these limitations, it is respectfully asserted that the primary reference Moore "teaches away" from the claimed structure quoted above.

Specifically, the USPTO respectfully admits on page 9 of the Office Action that Moore "does not teach[]: the first heating unit is a heater formed on a substrate holding surface of the substrate holding unit." The USPTO respectfully attempts to overcome this

deficiency in the primary reference Moore by citing Ushikoshi to teach the specifically claimed heater of claim 1.

However, it is respectfully important to note that Moore “teaches away” from using the specifically claimed heater formed on a substrate holding surface of the substrate holding unit (see MPEP 2145.X.D.2 - “References Cannot Be Combined Where Reference Teaches Away From Their Combination”). Specifically, **Moore teaches that a susceptor is positioned between the heater and the wafers in the alleged deposition chamber.** For example, as seen in Figure 2B of Moore, susceptor 201 is positioned between heater 224 and wafers 210. As another example, Figure 3A of Moore shows susceptor 302 positioned between heat distributor 307 and wafer 312. In contrast, as seen in Figure 6 of Ushikoshi, heater 1 directly contacts wafers 4.

It is respectfully important to note that in all the Figures of Moore, **the heater is shown positioned under a susceptor, and not formed on a substrate holding surface,** as claimed in claim 1. Furthermore, Moore teaches at column 10, lines 38-49 that **without a susceptor interposed between the wafer and the heater, there would be a temperature differential between the center and perimeter of each wafer 210.** It is respectfully important to note that **Moore considered the use of a heater that would directly contact the wafers, but rejected this configuration** in favor of the device with a susceptor between the heater and the wafers, in order to minimize temperature differentials (see column 10, lines 39-48 of Moore). Thus, it is respectfully asserted that Moore “teaches away” from a structure in which the heater is formed on a substrate holding surface, as claimed in claim 1.

In other words, **Moore “teaches away” from using the type of heater allegedly taught in Ushikoshi.** Thus, it is respectfully asserted that the heater taught in Ushikoshi cannot be combined with Moore in an obviousness rejection (see MPEP 2145.X.D.2 – “References Cannot Be Combined Where Reference Teaches Away From Their Combination”), and it is therefore further respectfully asserted that claim 1 is not obvious over Moore and Ushikoshi.

B. The dependent claims.

As noted above, it is respectfully asserted that independent claim 1 is allowable, and therefore it is further respectfully asserted that dependent claims 2-4 and 6-7 are also allowable.

III. The anticipation rejection based on Takagi (US 5,445,676).

The USPTO respectfully rejects claims 1, 3-4, and 6-8 under 35 U.S.C. § 102 (b) as being anticipated by Takagi. Claim 1 is an independent claim.

A. Takagi does not disclose that the first heating unit is a heater formed on a substrate holding surface of the substrate holding unit, as claimed in claim 1.

Claim 1 claims in relevant part:

“wherein the first heating unit is a heater formed on a substrate holding surface of the substrate holding unit.” (emphasis added)

No new matter is introduced by these amendments because the amendments incorporate the limitations of claim 5 into independent claim 1. Regarding these limitations, it is respectfully not seen where Takagi discloses the claimed structure quoted above.

Specifically, the USPTO respectfully alleges that Takagi teaches a first heating unit 26 and a second heating unit 22, as seen in Figure 7 of Takagi. However, it is respectfully important to note that Figure 7 of Takagi shows both heater 26 and heater 22 on the side walls of the device. Thus, neither heater 26 nor heater 22 are formed on a substrate holding surface of the substrate holding unit, as claimed in claim 1.

In contrast, present Figure 3 illustrates one possible embodiment of the claimed structure quoted above. Specifically, present Figure 3 shows a heater 208 formed on the supporting unit 214 (see pages 17-18 of the present specification for further explanation). Thus, heater 208 is formed on a substrate holding surface of the substrate holding unit (i.e., the top surface of supporting unit 214), as claimed in claim 1.

Thus, it is respectfully asserted that Takagi does not disclose all the claimed limitations of claim 1. Therefore, it is respectfully asserted that Takagi does not anticipate claim 1.

B. The dependent claims.

As noted above, it is respectfully asserted that claim independent claim 1 is allowable, and therefore it is further respectfully asserted that dependent claims 3-4 and 6-8 are also allowable.

IV. The obviousness rejections based on Moore in view of Ushikoshi.

The USPTO respectfully rejects claim 5 under 35 U.S.C. § 103(a) as being obvious over Moore in view of Ushikoshi. Applicants respectfully note that claim 5 has been cancelled, and the rejection has been addressed above because the limitations of claim 5 were incorporated into claim 1.

V. The obviousness rejections based on Moore in view of Suflarto (US 6,395,092) and Kusuda (US 2002/0195437).

The USPTO respectfully rejects claims 9-11 under 35 U.S.C. § 103(a) as being obvious over Moore in view of Suflarto and Kusuda. As noted above, it is respectfully asserted that independent claim 1 is allowable, and therefore it is further respectfully asserted that dependent claims 9-11 are also allowable.

VI. Conclusion.

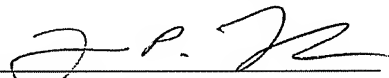
Reconsideration and allowance of all of the claims is respectfully requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130.

Please contact the undersigned for any reason. Applicants seek to cooperate with the Examiner including via telephone if convenient for the Examiner.

Respectfully submitted,

CANTOR COLBURN LLP

By 

Daniel P. Lent

Registration No. 44,867

Date: August 2, 2007
CANTOR COLBURN LLP
55 Griffin Road South
Bloomfield, CT 06002
Telephone (860) 286-2929
Facsimile (860) 286-0115
Customer No.: 23413